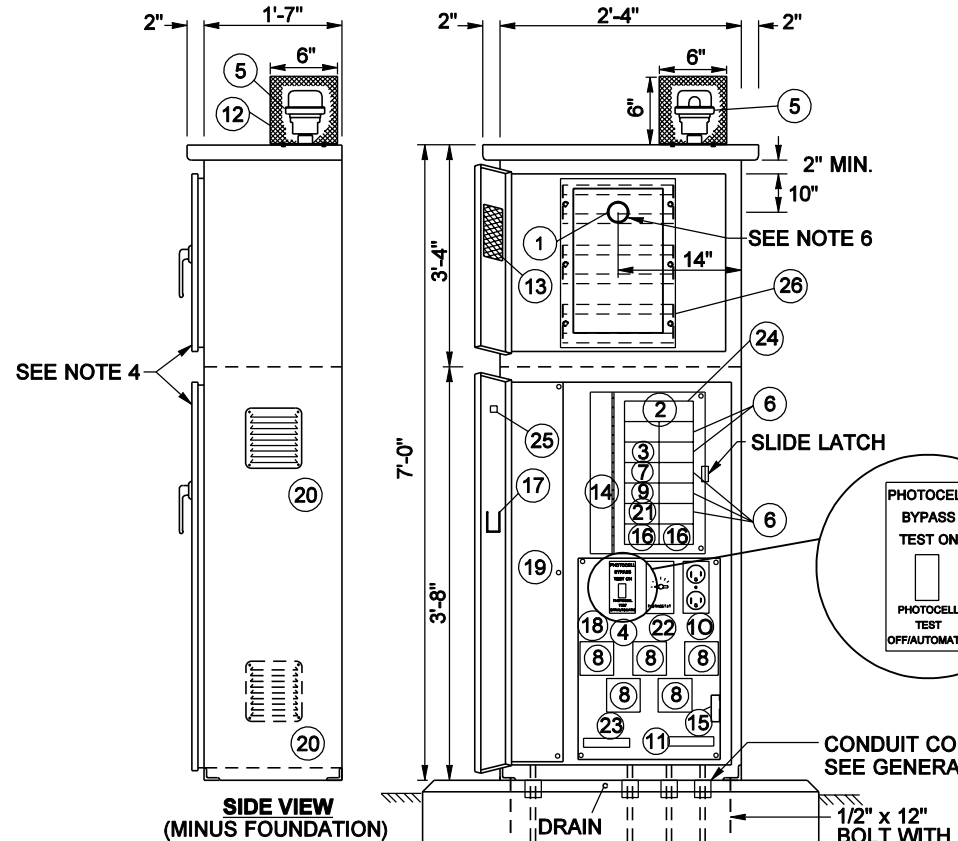


NOTE: INSTALL FOUNDATION AS SLAB SECTION UNLESS IDENTIFIED FOR CONSTRUCTION IN FENCE LINE IN CONTRACT PLANS.

**FRONTAGE ROAD** **MAINLINE ROADWAY**

**INSTALLATION DETAIL**



**SERVICE CABINET DETAIL**

- SEE DIVISION 9, SERVICE CABINETS, IN THE STANDARD SPECIFICATIONS.
- HINGES SHALL HAVE STAINLESS STEEL OR BRASS PINS.
- CABINETS SHALL BE RATED NEMA 3R AND SHALL INCLUDE TWO RAIN TIGHT VENTS.
- METERING EQUIPMENT DOOR SHALL BE PAD LOCKABLE. EACH DOOR SHALL BE GASKETED. INSTALL BEST CX CONSTRUCTION CORE ON BOTTOM DOOR. SEE DOOR HINGE DETAIL, SPECIAL DESIGN SERVICE CABINET TYPE B MODIFIED. CONCEALED HEAVY DUTY STAINLESS STEEL LIFT OFF HINGES ARE ALLOWED AS AN ALTERNATIVE TO DOOR HINGE DETAIL SHOWN ON SPECIAL DESIGN SERVICE CABINET TYPE B MODIFIED. UPPER DOOR SHALL HAVE 2 HINGES AND LOWER DOOR SHALL HAVE 3 HINGES. BOTH DOORS SHALL HAVE A TWO POSITION DOOR STOP ASSEMBLY.
- THE FOLLOWING EQUIPMENT WITHIN THE SERVICE ENCLOSURE SHALL HAVE AN APPROPRIATELY ENGRAVED PHENOLIC NAME PLATE ATTACHED WITH SCREWS OR RIVETS:  
KEY NUMBERS 2, 3, 4, 6, 7, 8, 9, 16 AND 21.  
KEY NUMBER 4 NAME PLATE SHALL READ; PHOTOCELL BYPASS TEST ON AND PHOTOCELL TEST OFF- AUTOMATIC. SEE SERVICE CABINET DETAIL.
- METERING ARRANGEMENTS VARY WITH DIFFERENT SERVING UTILITIES. THE UTILITY MAY REQUIRE METER BASE MOUNTING IN THE ENCLOSURE, ON THE SIDE OR ON THE BACK OF THE ENCLOSURE. THE UTILITY MAY REQUIRE THE DIMENSION BETWEEN THE DOOR AND THE FRONT OF THE SAFETY SOCKET BOX TO BE LESS THAN THE 11 INCHES SHOWN IN THE LEFT SIDE- SAFETY SOCKET BOX MOUNTING DETAIL. SEE SPECIAL DESIGN SERVICE CABINET TYPE B MODIFIED FOR SAFETY SOCKET BOX DETAIL. THE CONTRACTOR SHALL VERIFY THE SERVING UTILITY'S REQUIREMENTS PRIOR TO FABRICATION OF AND INSTALLING THE SERVICE EQUIPMENT.
- DIMENSIONS SHOWN ARE MINIMUM AND SHALL BE ADJUSTED TO ACCOMMODATE THE VARIOUS SIZES OF EQUIPMENT INSTALLED.

#6 INSULATED STRANDED  
OZ GEDNEY TYPE GC BRONZE GROUND CLAMP OR EQUIVALENT (TYP.)

CONDUIT

FENCE POST  
CONDUIT TO FENCE POST BONDING POINT

SERVICE CABINET

**DETAIL A**

**FOUNDATION PLAN VIEW**

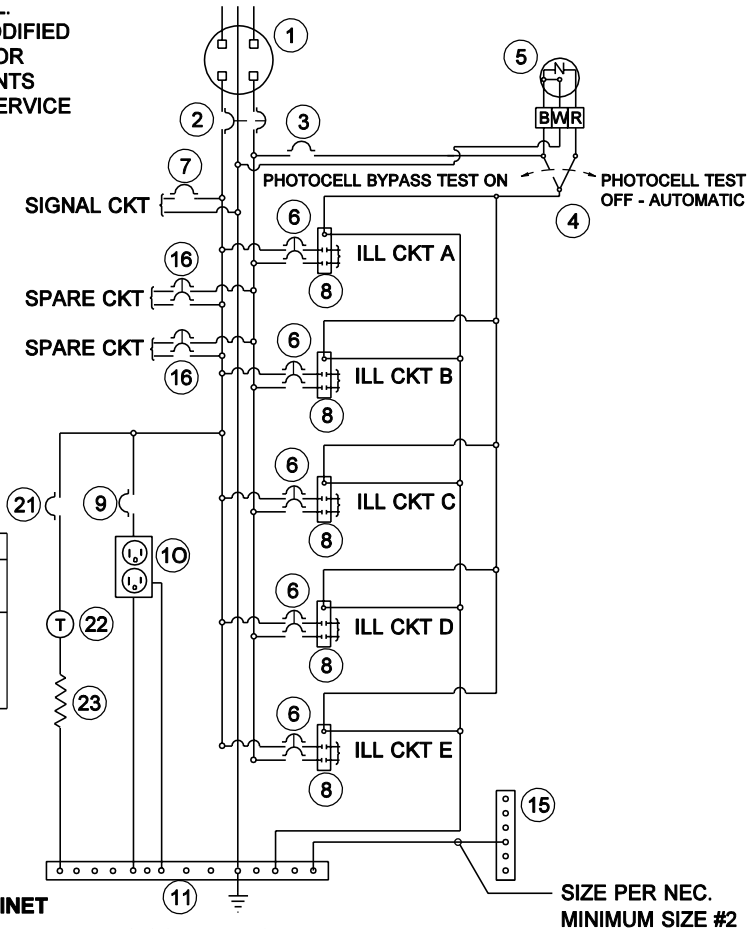
**SPECIAL DESIGN SERVICE CABINET TYPE D**  
**0-200 AMP TYPE 120/240 1Ø SERVICE CABINET**

**GENERAL NOTES**

**200 AMP TYPE 120/240 1Ø SERVICE CABINET**

- ALL BUSSWORK SHALL BE HIGH GRADE COPPER AND SHALL EQUAL OR EXCEED THE MAIN BREAKER RATING. ALL BREAKERS SHALL BOLT ONTO THE BUSSWORK. JUMPERING OF BREAKERS SHALL NOT BE ALLOWED. BUSSWORK SHALL ACCOMMODATE ALL FUTURE EQUIPMENT AS SHOWN IN THE BREAKER SCHEDULE.
- THE PHOTOCELL UNIT SHALL BE CENTERED IN THE PHOTOCELL ENCLOSURE TO PERMIT 360 DEGREE ROTATION OF THE PHOTOCELL WITHOUT REMOVAL OF THE PHOTOCELL UNIT OR THE PHOTOCELL ENCLOSURE.
- ALL INTERNAL WIRE RUNS SHALL BE IDENTIFIED WITH "TO - FROM" CODED TAGS LABELED WITH THE CODE LETTERS AND/OR NUMBERS SHOWN ON THE SCHEDULES. APPROVED PVC OR POLYOLEFIN WIRE MARKING SLEEVES SHALL BE USED.
- ALL NUTS, BOLTS AND WASHERS USED FOR MOUNTING THE PHOTOCELL ENCLOSURE SHALL BE STAINLESS STEEL.
- A 1% TOLERANCE IS ALLOWED FOR ALL DIMENSIONS.
- THE PHOTOCELL CIRCUIT SHALL BE INSTALLED IN FLEX CONDUIT WITHIN THE METER COMPARTMENT. INSTALL CONDUIT COUPLINGS ON ALL CONDUITS. PLACE COUPLINGS FLUSH WITH TOP OF CONCRETE FOUNDATION.
- SEE PLANS FOR BREAKER SCHEDULE.
- SEAL CABINET TO FOUNDATION WITH A 1/2 " BEAD OF SILICONE. APPLY SILICONE TO DRY SURFACE ONLY.
- THE METER BASE PORTION OF THIS SERVICE WAS DESIGNED TO MEET METERING PORTION OF EUSERC DRAWING 309 REQUIREMENTS.

**120/240 VAC**



**WIRING SCHEMATIC**

**KEY**

- METER BASE PER SERVING UTILITY REQUIREMENTS. AS A MINIMUM, THE METER BASE SHALL BE SAFETY SOCKET BOX WITH FACTORY INSTALLED TEST BYPASS FACILITY THAT MEETS THE REQUIREMENTS OF EUSERC DRAWING 305.
- MAIN BREAKER (SEE BREAKER SCHEDULE)
- PHOTOCELL BREAKER (SPST 15 AMP - 120/240 VOLT)
- TEST SWITCH ( SPDT SNAP ACTION, POSITIVE CLOSE 15 AMP - 120/277 VOLT "T" RATED)
- PHOTO ELECTRIC CONTROL, STD. SPEC. 9 - 29.11(2)
- BRANCH BREAKER (SEE BREAKER SCHEDULE)
- SIGNAL BREAKER (SEE BREAKER SCHEDULE)
- CONTACTOR (SEE BREAKER SCHEDULE)
- RECEPTACLE BREAKER (SPST 20 AMP - 120/240 VOLT)
- RECEPTACLE, GROUNDED (GFCI 20 AMP - 125 VOLT)
- NEUTRAL BUSS, 14 LUG COPPER
- PHOTOCELL ENCLOSURE - ENCLOSURE TO BE FABRICATED FROM 5/8" EXPANDED STEEL MESH WITH WELDED SEAMS AND MOUNTING FLANGES. HOT DIP GALVANIZED AFTER FABRICATION. TYPE 5052 - H32 ALUMINUM WITH 5/8" x 5/8" OPENINGS EQUIVALENT TO 5/8" EXPANDED STEEL MESH MAY BE USED AS ALTERNATIVE MATERIAL. SEE PHOTOCELL ENCLOSURE MOUNTING DETAILS. SPECIAL DESIGN SERVICE CABINET TYPE B MODIFIED.
- HINGED FRONT FACING DOOR WITH 4" x 4" MIN POLISHED WIRE GLASS WINDOW.
- HINGED DEAD FRONT WITH 1/4 TURN FASTENERS OR SLIDE LATCH
- CABINET MAIN BONDING JUMPER. BUSS SHALL BE 4 LUG TINNED COPPER. SEE CABINET MAIN BONDING JUMPER DETAIL ON SPECIAL DESIGN SERVICE CABINET TYPE B MODIFIED.
- SPARE BRANCH BREAKER (DPST 20AMP- 120/240 VOLT)
- METAL WIRING DIAGRAM HOLDER
- REMOVABLE EQUIPMENT MOUNTING PAN
- 6" x 6" MIN UNDERGROUND FEED - SERVICE WIREWAY (LEFT REAR CORNER)
- SCREENED VENTS, 2 REQUIRED, 1 EACH SIDE, LOUVERED PLATES
- HEATER BREAKER (SPST 15 AMP - 120/240 VOLT)
- THERMOSTAT, 40°F CLOSURE - 3 DIFFERENTIAL
- STRIP HEATER (100 WATT NOMINAL) , WITH TERMINAL STRIP COVER
- 24 CIRCUIT PANEL BOARD- MINIMUM SIZE WITH SEPARATE MAIN BREAKER
- LABEL CABINET WITH BUSSWORK RATING
- REMOVABLE MOUNTING PANEL 19" w x 33" h. SEE SPECIAL DESIGN SERVICE CABINET TYPE B MODIFIED FOR REMOVABLE MOUNTING PANEL DETAILS.

|  |  |                               |  |               |            |              |       |                  |  |                    |       |                                       |  |  |
|--|--|-------------------------------|--|---------------|------------|--------------|-------|------------------|--|--------------------|-------|---------------------------------------|--|--|
| FILE NAMEs:\414126\Electrical\MASTER_FILES\DETAILS\TYPE_D-10-31-02.dgn |  |                               |  |               | REGION NO. |              | STATE | FED.AID PROJ.NO. | MINIMUM SIZE #2  |                    | PLOT1 |                                       |  |  |
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| DATE11/07/2002   |  |                               |  |               |            | 10WASH       |       |                  |  | SHEET1 OF 1 SHEETS |       |                                       |  |  |
| DESIGNED BY  |  | ADD KEY NOTE 26               |  | 10-31-2002 JH |            | JOB NUMBER   |       |                  |  |                    |       |                                       |  |  |
| ENTERED BY   |  | ADD REMOVEABLE MOUNT. PANEL   |  | 8-20-2002 JH  |            |              |       |                  |  |                    |       |                                       |  |  |
| CHECKED BY   |  | KEY 24 & 25,CABINET HEIGHT    |  | 6-06-2002 JH  |            | CONTRACT NO. |       | LOCATION NO.     |  |                    |       |                                       |  |  |
| PROJ. ENGR.  |  | REVISIONS TO MEET EUSERC REQ. |  | 9-20-2001 JH  |            |              |       |                  |  |                    |       |                                       |  |  |
| REGIONAL ADM.  |  | REVISION                      |  | DATE BY       |            |              |       |                  |  | ENGLISH            |       |                                       |  |  |
| <div>WIRING SCHEMATIC</div>  |  |                               |  |               |            |              |       |                  | <div>Washington State<br/>Department of Transportation</div> |                    |       | <div>SERVICE CABINET<br/>TYPE D</div> |  |  |
| <div>P.F. STAMP BOX</div>  |  |                               |  |               |            |              |       |                  | <div>P.F. STAMP BOX</div>                                    |                    |       | <div>ENGLISH</div>                    |  |  |